

## ABSTRACT

A security system for facilitating transponder carrier identification and tracking within a secure area comprising: an RF transponder having a memory in which is stored a unique identifier; and a transponder writer operable to send a replacement unique identifier to the transponder, the transponder replacing the identifier in the transponder memory with the replacement identifier.

Also disclosed is an RF transponder for use in a security system for facilitating transponder carrier identification and tracking within a secure area comprising: a first memory in which is stored a replaceable unique identifier; and a transmitter operable to send the unique identifier in response to an interrogation signal.

Also disclosed is an RF transponder reader operable to send an interrogation signal to an RF transponder having a unique identifier and receive from the transponder, in response to the interrogation signal, the unique identifier, the reader being operable to transmit the unique identifier to a security processor for identity verification.

Also disclosed is a method of identity verification comprising the steps of: interrogating an RF transponder with an interrogation signal; receiving a unique identifier from the transponder provided in response to the interrogation signal; authenticating the identity of a user carrying the transponder; assigning a replacement unique identifier; and writing the replacement unique identifier to the transponder to replace the received unique identifier.